Chapter

10

PLANS AND STAGING PROGRAM

Chapter

10

PLANS & STAGING PROGRAM

for the Airport Master Plan and Environmental Assessment for the San Carlos Apache Airport

10.0 GENERAL

In Chapters V and VI, "Facility Requirements" and "Development Alternatives" an evaluation was made of future options for airside and landside development. This effort resulted in the selection of an alternative for future airport improvements at the San Carlos Apache Airport. The purpose of this Chapter is to describe the Airport Layout Plan Drawing Set that depicts the development selected by the Sponsor to be accomplished at the existing site.

The set of plans, referred to as the Airport Layout Plan, has been prepared to graphically depict the recommendations for airfield layout, disposition of obstructions, and future use of land in the vicinity of the airport. The Airport Layout Plan drawing set consists of the following drawings:

- Cover Sheet
- Airport Layout Plan Drawing
- Building Area Plan Drawing
- Airport Airspace Drawing
- Inner Portion of the Approach Surface Drawing
- Land Use Drawing
- Exhibit "A" Property Map
- Aerial Photograph

10.1 DESIGN STANDARDS

The San Carlos Apache Airport has been identified as a general aviation type facility that will be designed to accommodate the aircraft in Airport Reference Code C-II which weigh less than 60,000 pounds dual wheel gear (DWG). Runway 9/27 will be designated as C-II runway which is planned for use by aircraft with wingspans of less

than 79 feet and approach speeds of less than 141 knots, although larger aircraft may use the airport if within their performance characteristics. Advisory Circulars published by the FAA have been used to provide general guidance in the overall planning effort. These guidelines are designed to provide flexibility in application to ensure the safe, economic, and efficient use of the airport.

In order to meet the design standards for a C-II runway, the major projects required at the San Carlos Apache Airport include relocating the runway by 100 feet to the south and relocating the existing drainage wash channel further to the south. These items, along with expansion of the aircraft parking apron and T-hangar development, are depicted in the Airport Layout Plan Drawing Set.

10.2 AIRPORT LAYOUT PLAN DRAWING

The Airport Layout Plan (ALP) drawing graphically presents the existing and future airport layout and depicts the recommended improvements which will enable the airport to meet forecasted aviation demand. Detailed airport and runway data are provided on the ALP to facilitate the interpretation of the master plan recommendations.

The Airport Layout Plan shows a number of airport improvements associated with both the airfield and the landside area. The improvements for the landside area are illustrated in more detail and at a larger scale on the Building Area Plan drawing and are discussed later in this Chapter.

10.3 BUILDING AREA PLAN

The Building Area Plan represents a refinement of the selected development configuration and provides a plan for construction of facilities to meet forecasted aviation demand. The condition and location of the existing building area will allow expansion for future airport operations. Included in the building area plan are the recommended locations for apron expansion and T-hangar development. The recommended building area development plan will accommodate future needs without disrupting current airport operations.

10.4 AIRPORT AIRSPACE DRAWING

The airport airspace drawing depicts a plan view of the airport FAR Part 77 surfaces and profiles of the Part 77 approach surfaces for the ultimate runway condition. The existing approaches to Runways 9 and 27 are visual with slopes of 20 to 1 for a distance of 5,000 feet. The planned approaches to Runways 9 and 27 are nonprecision instrument approaches utilizing the Global Positioning System (GPS) with slopes of 34 to 1 for a distance of 10,000 feet. The plans and profiles facilitate identification of obstructions, roadways, and buildings that lie within the confines of the Part 77 Airspace and the approach surfaces of each runway.

10.5 INNER PORTION OF THE APPROACH SURFACES DRAWING

This drawing provides a larger scale plan and profile of the inner portion of the approach surfaces, extending to where the approach slope reaches 100 feet in height, and the Runway Protection Zones for each existing and planned runway end. The plan depicts the physical features in the vicinity of each runway end, including topographic changes, roadways, and trees. The dimensions and slopes of approach surfaces are functions of the runway service category and the approach classification.

10.6 LAND USE PLAN

The Land Use Plan depicts the zoning regions within the airport vicinity and those land uses authorized by the San Carlos Apache Tribe. The Tribe, in coordination with the FAA, state, and local governments, should strive to coincide zoning regions with the compatible land uses outlined in Federal Aviation Regulation 150/5020-1, "Noise Control and Compatibility Planning for Airports".

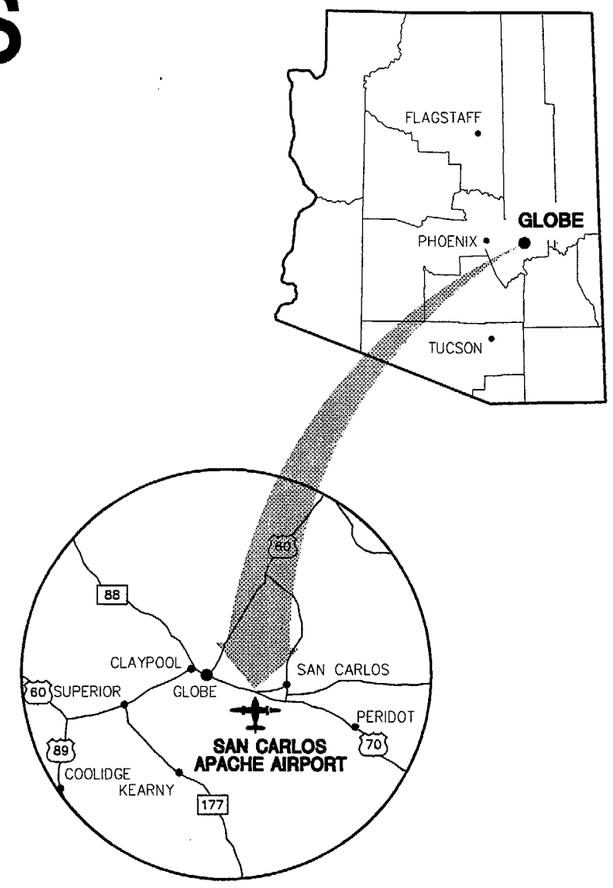
10.7 EXHIBIT "A" PROPERTY MAP

The Exhibit "A" Property Map identifies the ownership or interests in each property tract located within the airport boundaries and those required for future aeronautical uses or development. When possible, the airport should pursue ownership of all properties within the airport boundaries, safety areas, and protection zones.

SAN CARLOS APACHE AIRPORT
AIRPORT LAYOUT PLANS
GLOBE, ARIZONA

ARMSTRONG PROJECT NO. 965484

AIRPORT SPONSOR
SAN CARLOS APACHE TRIBE



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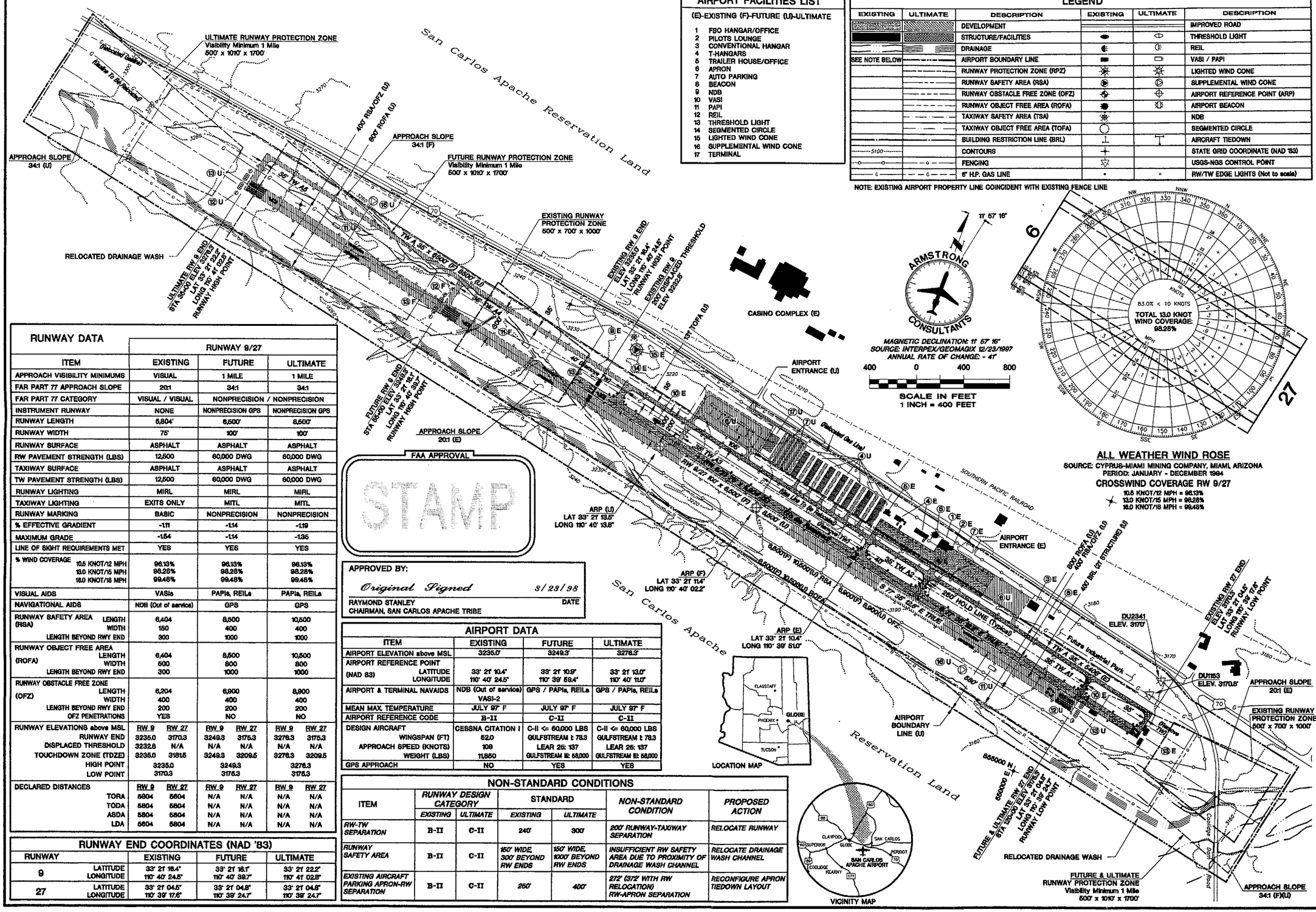

AIRPORT FACILITIES LIST

(E)-EXISTING (F)-FUTURE (U)-ULTIMATE

1. FBO HANGAR/OFFICE
2. PILOTS LOUNGE
3. CONVENTIONAL HANGAR
4. T-HANGARS
5. TRAILER HOUSE/OFFICE
6. APRON
7. AUTO PARKING
8. BEACON
9. NDB
10. VASI
11. PAPI
12. REIL
13. THRESHOLD LIGHT
14. SEGMENTED CIRCLE
15. LIGHTED WIND CONE
16. SUPPLEMENTAL WIND CONE
17. TERMINAL

LEGEND

EXISTING	ULTIMATE	DESCRIPTION	EXISTING	ULTIMATE	DESCRIPTION
		DEVELOPMENT			IMPROVED ROAD
		STRUCTURE/FACILITIES			THRESHOLD LIGHT
		DRAINAGE			REIL
SEE NOTE BELOW		AIRPORT BOUNDARY LINE			VASI / PAPI
		RUNWAY PROTECTION ZONE (RPZ)			LIGHTED WIND CONE
		RUNWAY SAFETY AREA (RSA)			SUPPLEMENTAL WIND CONE
		RUNWAY OBSTACLE FREE ZONE (OFZ)			AIRPORT REFERENCE POINT (ARP)
		RUNWAY OBJECT FREE AREA (ROFA)			AIRPORT BEACON
		TAXIWAY SAFETY AREA (TSA)			NDB
		TAXIWAY OBJECT FREE AREA (TOFA)			SEGMENTED CIRCLE
		BUILDING RESTRICTION LINE (BRL)			AIRCRAFT TIEDOWN
5100		CONTOURS			STATE GRID COORDINATE (NAD '83)
		FENCING			USGS-NGS CONTROL POINT
G	G	6" H.P. GAS LINE			RW/TW EDGE LIGHTS (Not to scale)

NOTE: EXISTING AIRPORT PROPERTY LINE COINCIDENT WITH EXISTING FENCE LINE

11° 57' 16"

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MAGNETIC DECLINATION: 11° 57' 16"
SOURCE: INTERPEX/GEOMAGIX 12/23/1997
ANNUAL RATE OF CHANGE: - 4'

400 0 400 800

SCALE IN FEET
1 INCH = 400 FEET

ALL WEATHER WIND ROSE
SOURCE: CYPRUS-MIAMI MINING COMPANY, MIAMI, ARIZONA
PERIOD: JANUARY - DECEMBER 1984

CROSSWIND COVERAGE RW 9/27
10.5 KNOT/12 MPH = 96.13%
13.0 KNOT/15 MPH = 98.28%
18.0 KNOT/18 MPH = 99.48%

RUNWAY DATA

ITEM	RUNWAY 9/27 EXISTING	FUTURE	ULTIMATE
APPROACH VISIBILITY MINIMUMS	VISUAL	1 MILE	1 MILE
FAR PART 77 APPROACH SLOPE	20:1	34:1	34:1
FAR PART 77 CATEGORY	VISUAL / VISUAL	NONPRECISION / NONPRECISION	
INSTRUMENT RUNWAY	NONE	NONPRECISION GPS	NONPRECISION GPS
RUNWAY LENGTH	6,804'	8,500'	8,500'
RUNWAY WIDTH	75'	100'	100'
RUNWAY SURFACE	ASPHALT	ASPHALT	ASPHALT
RW PAVEMENT STRENGTH (LBS)	12,500	60,000 DWG	60,000 DWG
TAXIWAY SURFACE	ASPHALT	ASPHALT	ASPHALT
TW PAVEMENT STRENGTH (LBS)	12,500	60,000 DWG	60,000 DWG
RUNWAY LIGHTING	MIRL	MIRL	MIRL
TAXIWAY LIGHTING	EXITS ONLY	MITL	MITL
RUNWAY MARKING	BASIC	NONPRECISION	NONPRECISION
% EFFECTIVE GRADIENT	-1.11	-1.14	-1.19
MAXIMUM GRADE	-1.54	-1.14	-1.35
LINE OF SIGHT REQUIREMENTS MET	YES	YES	YES
% WIND COVERAGE 10.5 KNOT/12 MPH	96.13%	96.13%	96.13%
13.0 KNOT/15 MPH	98.28%	98.28%	98.28%
18.0 KNOT/18 MPH	99.48%	99.48%	99.48%
VISUAL AIDS	VASIs	PAPIs, REILs	PAPIs, REILs
NAVIGATIONAL AIDS	NDB (Out of service)	GPS	GPS
RUNWAY SAFETY AREA (RSA) LENGTH	6,404	8,500	10,500
WIDTH	150	400	400
LENGTH BEYOND RWY END	300	1000	1000
RUNWAY OBJECT FREE AREA (ROFA) LENGTH	6,404	8,500	10,500
WIDTH	500	800	800
LENGTH BEYOND RWY END	300	1000	1000
RUNWAY OBSTACLE FREE ZONE (OFZ) LENGTH	6,204	8,900	8,900
WIDTH	400	400	400
LENGTH BEYOND RWY END	200	200	200
OFZ PENETRATIONS	YES	NO	NO

RUNWAY ELEVATIONS above MSL	RW 9	RW 27	RW 9	RW 27	RW 9	RW 27
RUNWAY END	3235.0	3170.3	3249.3	3175.3	3276.3	3175.3
DISPLACED THRESHOLD	3232.8	N/A	N/A	N/A	N/A	N/A
TOUCHDOWN ZONE (TDZE)	3235.0	3181.5	3249.3	3209.5	3276.3	3209.5
HIGH POINT	3235.0		3249.3		3276.3	
LOW POINT	3170.3		3175.3		3175.3	

DECLARED DISTANCES	RW 9	RW 27	RW 9	RW 27	RW 9	RW 27
TORA	5804	5804	N/A	N/A	N/A	N/A
TODA	5804	5804	N/A	N/A	N/A	N/A
ASDA	5804	5804	N/A	N/A	N/A	N/A
LDA	5804	5804	N/A	N/A	N/A	N/A

RUNWAY END COORDINATES (NAD '83)

RUNWAY		EXISTING	FUTURE	ULTIMATE
9	LATITUDE	33° 21' 16.4"	33° 21' 18.1"	33° 21' 22.2"
	LONGITUDE	110° 40' 24.5"	110° 40' 39.7"	110° 41' 02.8"
27	LATITUDE	33° 21' 04.5"	33° 21' 04.8"	33° 21' 04.6"
	LONGITUDE	110° 39' 17.6"	110° 39' 24.7"	110° 39' 24.7"

FAA APPROVAL

STAMP

APPROVED BY:

Original Signed 9/23/98

RAYMOND STANLEY — DATE
CHAIRMAN, SAN CARLOS APACHE TRIBE

AIRPORT DATA

ITEM	EXISTING	FUTURE	ULTIMATE
AIRPORT ELEVATION above MSL	3235.0'	3249.3'	3276.3'
AIRPORT REFERENCE POINT (NAD 83) LATITUDE	33° 21' 10.4"	33° 21' 10.9"	33° 21' 13.0"
AIRPORT REFERENCE POINT (NAD 83) LONGITUDE	110° 40' 24.5"	110° 39' 59.4"	110° 40' 11.0"
AIRPORT & TERMINAL NAVAIDS	NDB (Out of service) VASI-2	GPS / PAPIs, REILs	GPS / PAPIs, REILs
MEAN MAX. TEMPERATURE	JULY 97° F	JULY 97° F	JULY 97° F
AIRPORT REFERENCE CODE	B-II	C-II	C-II
DESIGN AIRCRAFT	CESSNA CITATION I	C-II <= 60,000 LBS	C-II <= 60,000 LBS
WINGSPAN (FT)	52.0	GULFSTREAM I: 73.3	GULFSTREAM I: 78.3
APPROACH SPEED (KNOTS)	109	LEAR 25: 137	LEAR 25: 137
WEIGHT (LBS)	11,850	GULFSTREAM II: 58,000	GULFSTREAM II: 58,000
GPS APPROACH	NO	YES	YES

LOCATION MAP

NON-STANDARD CONDITIONS

ITEM	RUNWAY DESIGN CATEGORY EXISTING	ULTIMATE	STANDARD EXISTING	ULTIMATE	NON-STANDARD CONDITION	PROPOSED ACTION
RW-TW SEPARATION	B-II	C-II	240'	300'	200' RUNWAY-TAXIWAY SEPARATION	RELOCATE RUNWAY
RUNWAY SAFETY AREA	B-II	C-II	150' WIDE, 300' BEYOND RW ENDS	150' WIDE, 1000' BEYOND RW ENDS	INSUFFICIENT RW SAFETY AREA DUE TO PROXIMITY OF DRAINAGE WASH CHANNEL	RELOCATE DRAINAGE WASH CHANNEL
EXISTING AIRCRAFT PARKING APRON-RW SEPARATION	B-II	C-II	250'	400'	272' (372' WITH RW RELOCATION) RW-APRON SEPARATION	RECONFIGURE APRON TIEDOWN LAYOUT

VICINITY MAP

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SAN CARLOS APACHE AIRPORT
GLOBE, ARIZONA
SPONSOR:
SAN CARLOS APACHE TRIBE
AIRPORT LAYOUT PLAN

No.	Revision	Date	By

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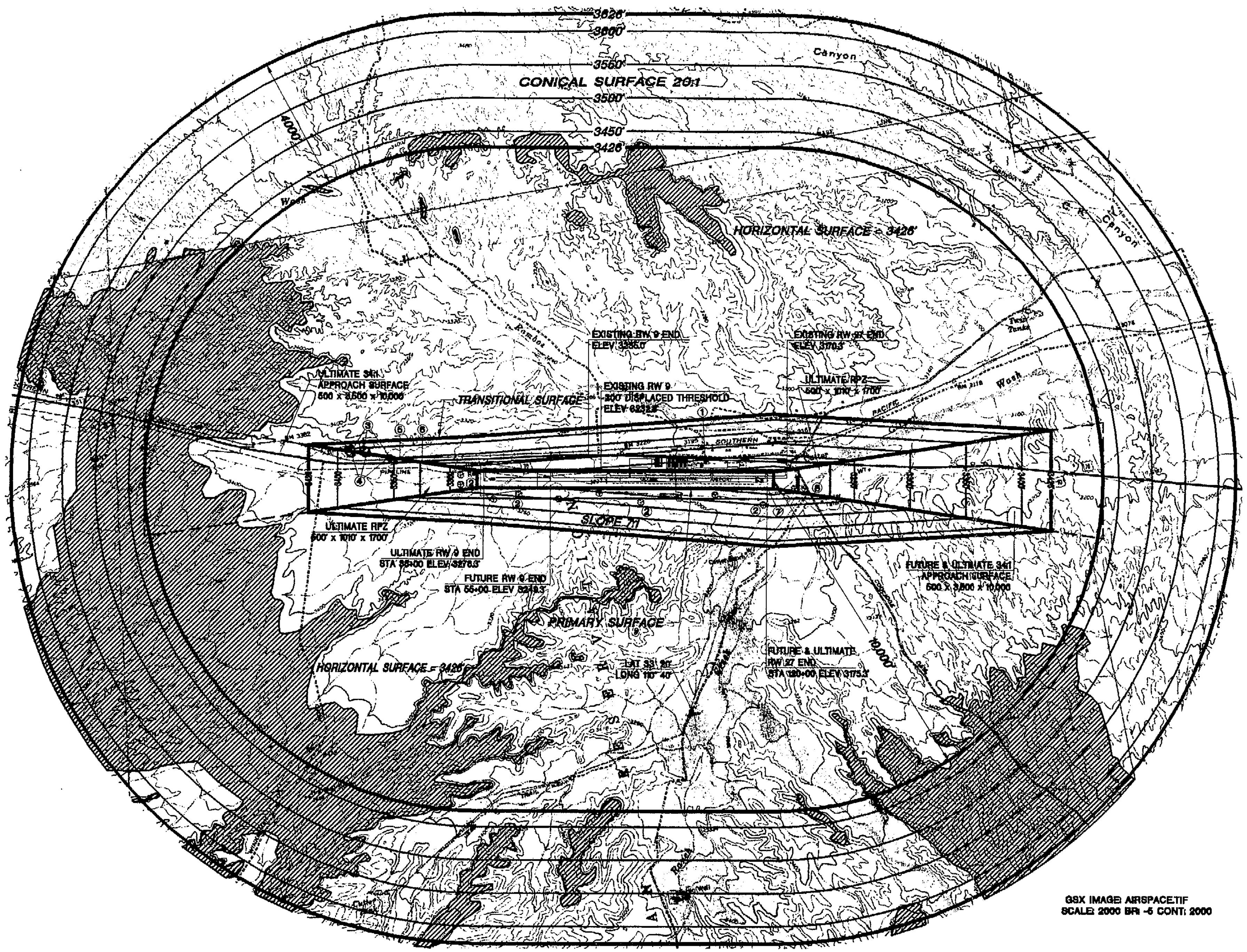
Project No: 965484
Date: 03/20/98
File Name: ALP

Drawn: KMS
Checked: DAC
Approved: EAA

AIRPORT LAYOUT PLAN

Sheet: 2 of: 11



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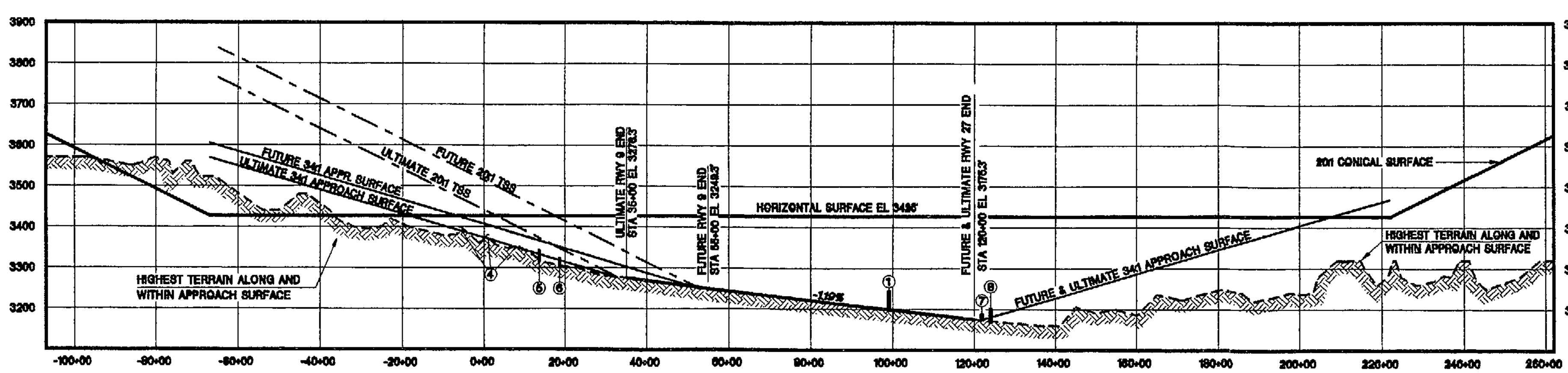


RUNWAY 9/27

PENETRATIONS

SURFACE	OBJECT	TOP ELEVATION	AMOUNT OF PENETRATION		PROPOSED ACTION
HORIZONTAL	TERRAIN	VARIES UP TO 3565	VARIES UP TO +139		NONE
CONICAL	TERRAIN	VARIES UP TO 3760	VARIES UP TO +136		NONE
TRANSITIONAL	1) BEACON	3241	+2		OBSTRUCTION LIGHT
TRANSITIONAL	2) TREES/SHRUBS	VARIES	VARIES		TRIM OR REMOVE
TRANSITIONAL	3) TERRAIN	3391	VARIES UP TO +21		NONE
			PART 77	THRESHOLD SITING	
APPROACH RWY 9	4) TERRAIN	3391	+21	-45	NONE (T.S.S. CLEAR)
RWY 9	5) RAILROAD	3341	+8	-42	OBSTRUCTION LIGHT
RWY 9	6) HIGHWAY	3322	+4	-36	OBSTRUCTION LIGHT
RWY 27	7) FENCE (E)	3179	+4	+4	RELOCATE FENCE
RWY 27	8) TREES/SHRUBS	3200	VARIES	VARIES	TRIM OR REMOVE

NOTES

a) NO CURRENT HEIGHT RESTRICTION ZONING IN EFFECT

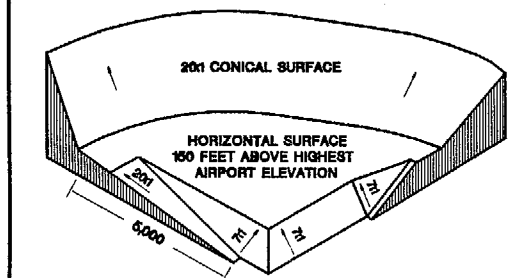
b) REFER TO "INNER PORTION OF THE APPROACH SURFACE" DRAWING FOR DETAILS ON ANY CLOSE-IN APPROACH OBSTRUCTIONS.

c) TSS = THRESHOLD SITING SURFACE

LEGEND

- ULTIMATE DEVELOPMENT
- AIRPORT PROPERTY BOUNDARY (U)
- RUNWAY PROTECTION ZONE
- PRIMARY SURFACE
- FAR PART 77 AIRSPACE SURFACES
- THRESHOLD SITING SURFACE
- COMPOSITE SURFACE ALONG HIGHEST TERRAIN
- TREE OR SHRUB
- TERRAIN PENETRATION

TYPICAL ISOMETRIC VIEW OF FAR PART 77 SURFACES



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2000 0 2000 4000

SCALE IN FEET

1" = 2000' PLAN VIEW
1" = 2000' PROFILE VIEW (Horizontal)
1" = 200' PROFILE VIEW (Vertical)

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SAN CARLOS APACHE AIRPORT
GLOBE, ARIZONA

AIRPORT LAYOUT PLANS

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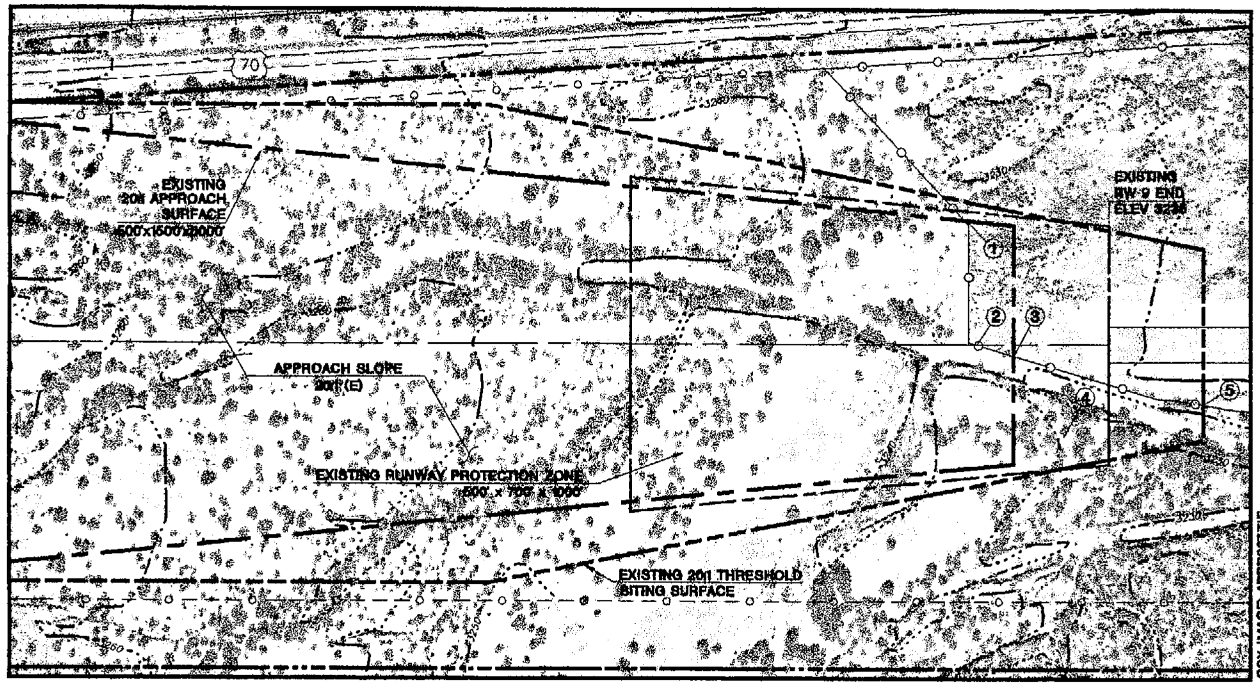
Project No: 965484
Date: 03/19/98
File Name: AIRSPACE

Drawn: TGM
Checked: DAC
Approved: EAA

PART "77" AIRSPACE DRAWING

Sheet: 3 of: 11



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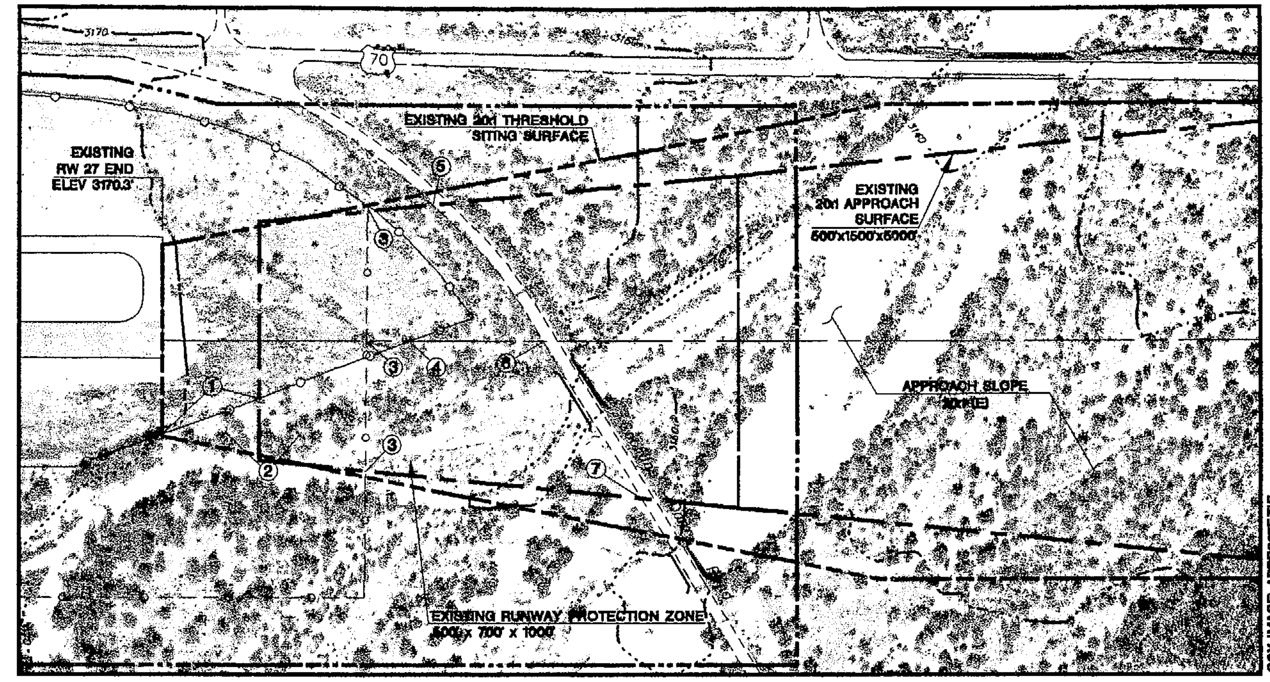
PLAN RUNWAY 9
SCALE: 1"=200'



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PLAN RUNWAY 27
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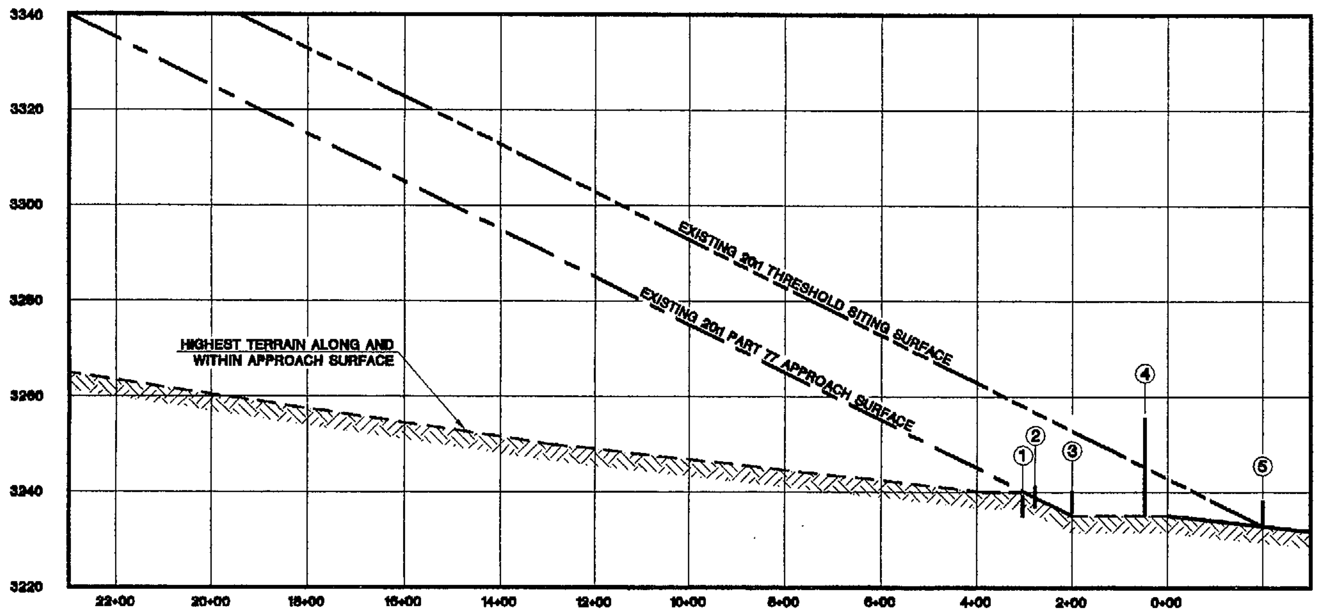
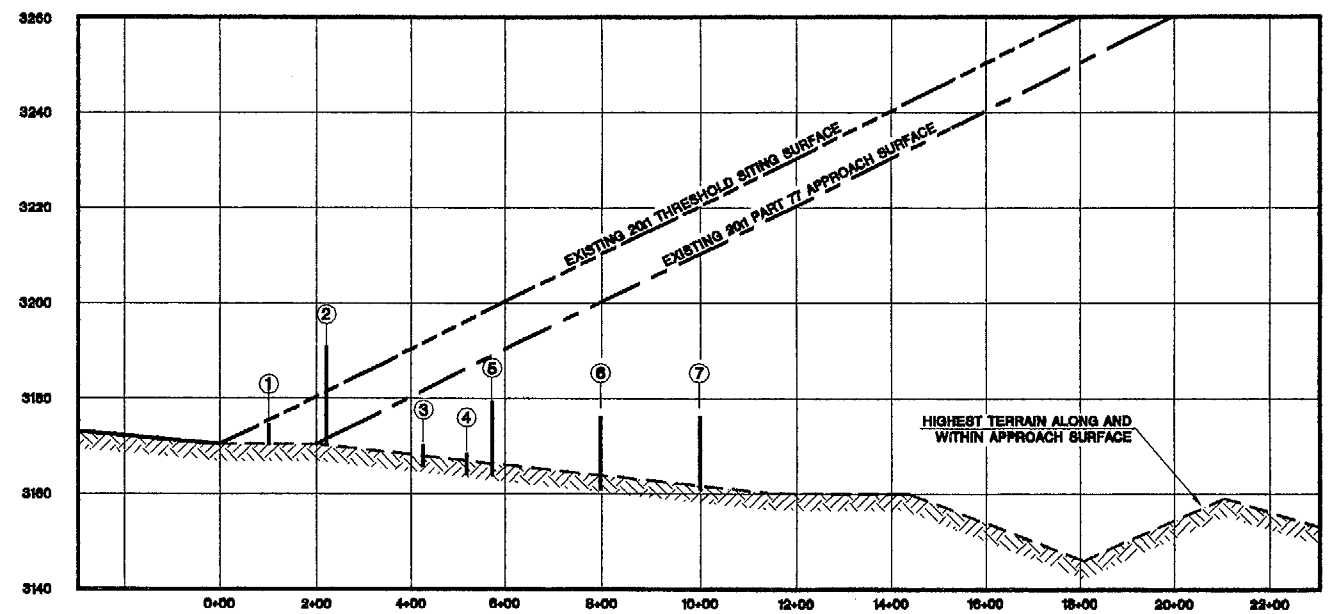


PROFILE RUNWAY 9
HORIZ. SCALE: 1"=200'
VERT. SCALE: 1"=20'



PROFILE RUNWAY 27
HORIZ. SCALE: 1"=200'
VERT. SCALE: 1"=20'

200 0 200 400
SCALE IN FEET

11° 57' 16"

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OBJECTS WITHIN RWY 9 INNER APPROACH SURFACE

NO.	OBJECT	TOP ELEVATION	AMOUNT OF PENETRATION (EXISTING) 20:1 APPROACH SURFACE	20:1 THRESHOLD SITING SURFACE	PROPOSED ACTION
1	FENCE (E)	3239	-1	-19	RELOCATE RW & FENCE
2	FENCE (E)	3241	+2	-16	RELOCATE RW & FENCE
3	FENCE (E)	3240	+5	-13	RELOCATE RW & FENCE
4	TREES/SHRUBS	3262	VARIES	VARIES	TRIM OR REMOVE
5	FENCE (E)	3238	-	+5	RELOCATE RW & FENCE

LEGEND

(box)	EXISTING DEVELOPMENT
(line)	APPROACH SURFACE
(line)	THRESHOLD SITING SURFACE (T.S.S.)
(line)	EXISTING GROUND PROFILE
(line)	FUTURE AIRPORT PROPERTY LINE (FAPL)
(line)	RUNWAY PROTECTION ZONE (RPZ)
4830	EXISTING CONTOURS
(line)	EXISTING FENCE
(line)	FUTURE FENCE
(line)	HIGHWAY

OBJECTS WITHIN RWY 27 INNER APPROACH SURFACE

NO.	OBJECT	TOP ELEVATION	AMOUNT OF PENETRATION (EXISTING) 20:1 APPROACH SURFACE	20:1 THRESHOLD SITING SURFACE	PROPOSED ACTION
1	FENCE (E)	3174	+4	+4	RELOCATE RW & FENCE
2	TREES/BUSHES	3198	VARIES	VARIES	TRIM OR REMOVE
3	FENCE (F)(U)	3170	-14	-24	NONE
4	FENCE (E)	3168	-18	-28	NONE
5	ROAD	3179	-10	-20	NONE
6	ROAD	3176	-24	-34	NONE
7	ROAD	3176	-34	-44	NONE

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SAN CARLOS APACHE AIRPORT
GLOBE, ARIZONA

AIRPORT LAYOUT PLANS

No.	Revision	Date	By

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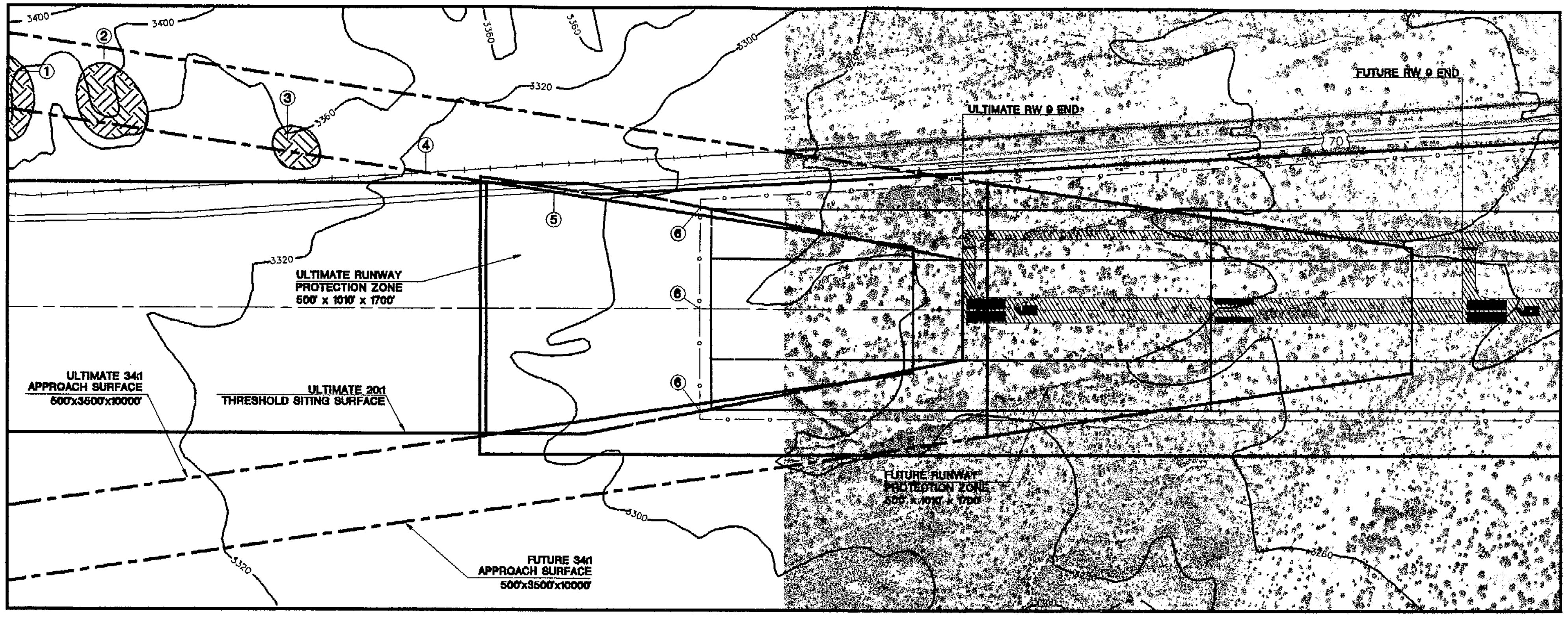
Drawn: TGM
Checked: DAC
Approved: EAA

EXISTING INNER APPROACH RW 9/27

Sheet 4 of 11



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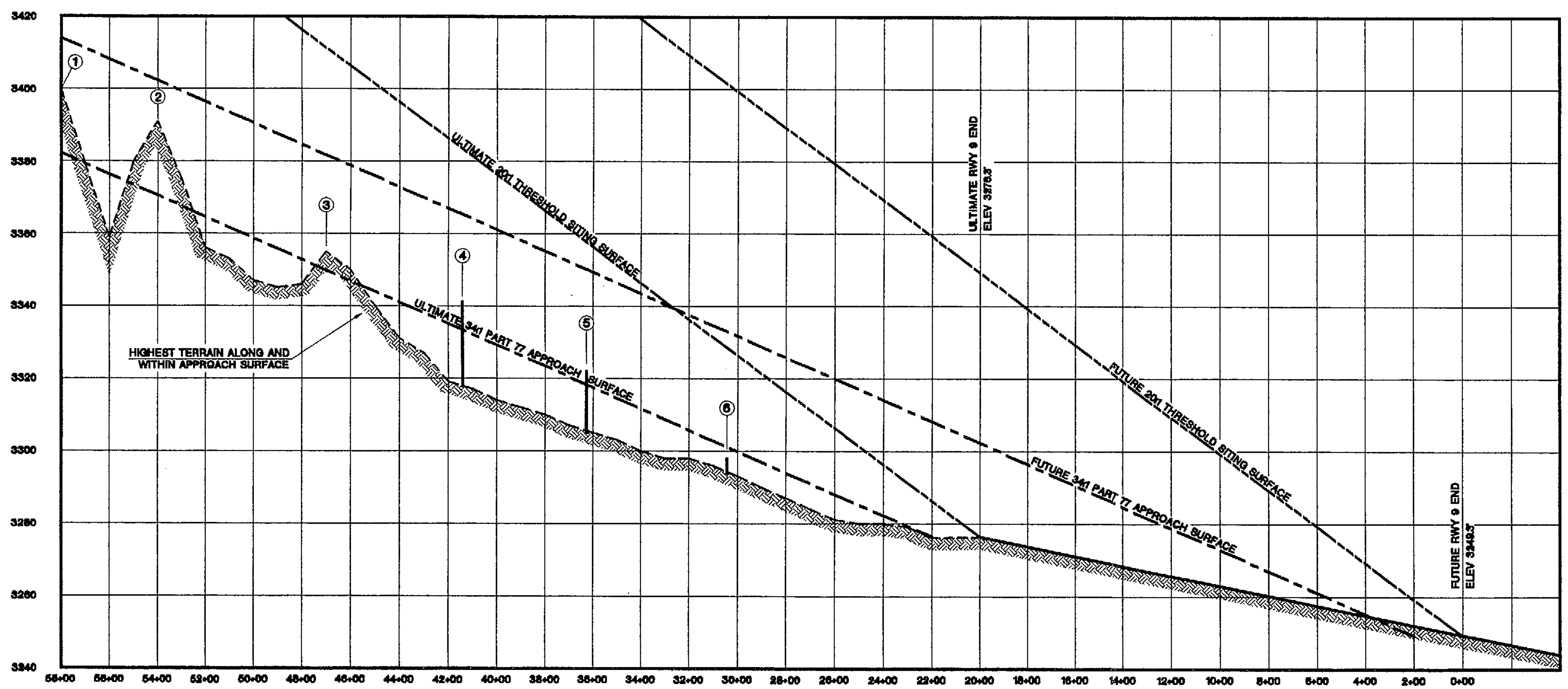
PLAN RUNWAY 9

SCALE: 1"=300'



PROFILE RUNWAY 9

HORIZ. SCALE: 1"=300'
VERT. SCALE: 1"=20'

LEGEND

- EXISTING DEVELOPMENT
- FUTURE DEVELOPMENT
- APPROACH SURFACE
- THRESHOLD SITING SURFACE (T.S.S.)
- EXISTING GROUND PROFILE
- AIRPORT PROPERTY LINE (APL)
- FUTURE AIRPORT PROPERTY LINE (FAPL)
- RUNWAY PROTECTION ZONE (RPZ)
- RUNWAY SAFETY AREA (RSA)
- RUNWAY OBJECT FREE ZONE (ROFZ)
- RUNWAY OBJECT FREE AREA (ROFA)
- BUILDING RESTRICTION LINE (BRL)
- 4830 EXISTING CONTOURS
- FUTURE FENCE
- HIGHWAY
- TERRAIN PENETRATION

11° 57' 16"

ARMSTRONG CONSULTANTS

MAGNETIC DECLINATION: 11° 57' 16"
SOURCE: INTERPEX/GEOMAGIX 12/23/1997
ANNUAL RATE OF CHANGE: - 41'

300 0 300 600
SCALE IN FEET

OBJECTS WITHIN RWY 9 INNER APPROACH SURFACE

NO.	OBJECT	TOP ELEVATION	AMOUNT OF PENETRATION (ULTIMATE)		PROPOSED ACTION
			34:1 SURF.	20:1 THRESHOLD SITING	
①	TERRAIN	3400	+18	-56	NONE (T.S.S. CLEAR)
②	TERRAIN	3391	+21	-45	NONE (T.S.S. CLEAR)
③	TERRAIN	3355	+5	-46	NONE (T.S.S. CLEAR)
④	RAILROAD	3341	+8	-42	OBSTRUCTION LIGHT
⑤	HIGHWAY	3322	+4	-36	OBSTRUCTION LIGHT
⑥	FENCE	3298	-3	-31	NONE

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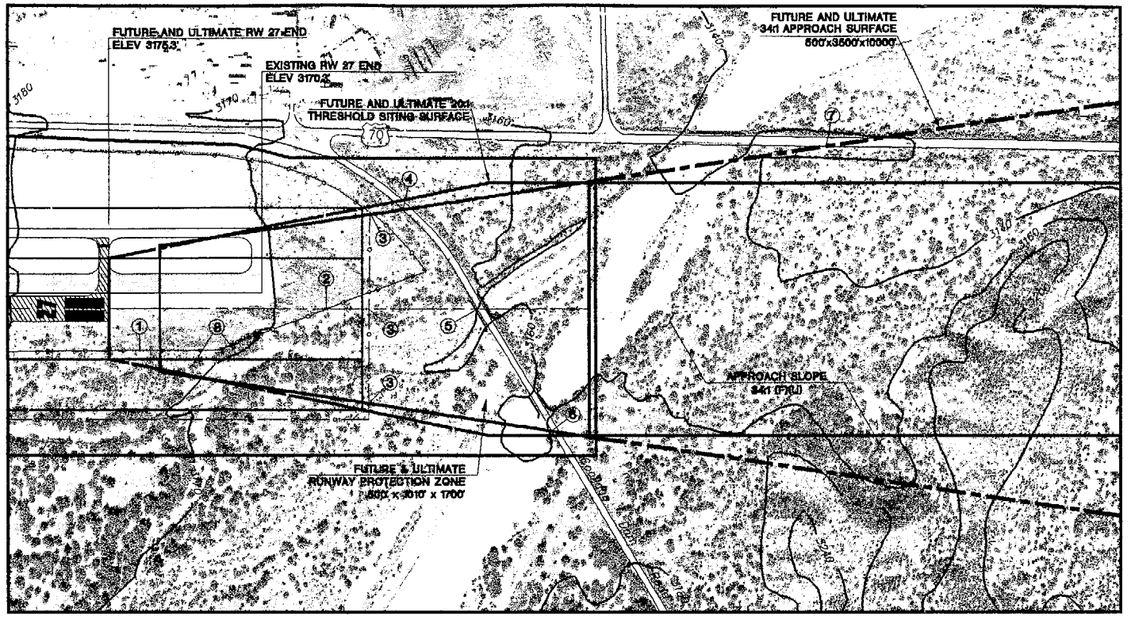
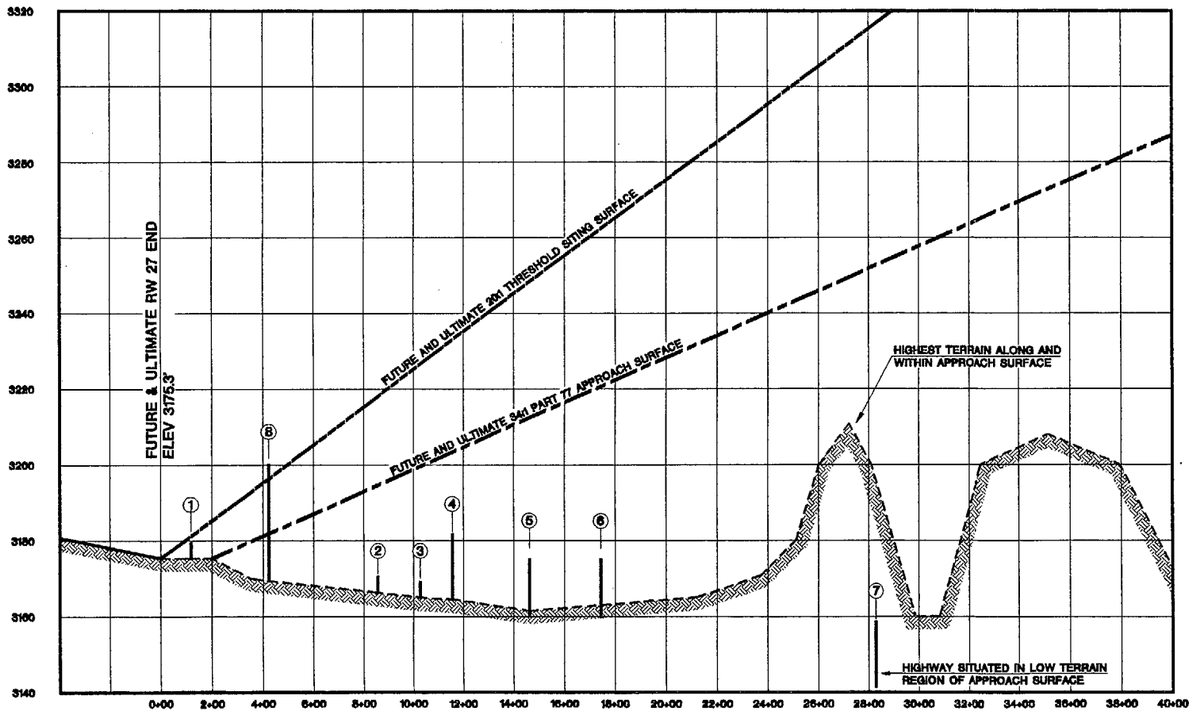
Approved: EAA

ULTIMATE INNER APPROACH RW 9

Sheet: 5 of: 11



PLAN RUNWAY 27
SCALE 1"=300'



PROFILE RUNWAY 27
HORIZ. SCALE 1"=300'
VERT. SCALE 1"=20'

LEGEND

- EXISTING DEVELOPMENT
- FUTURE DEVELOPMENT
- APPROACH SURFACE
- THRESHOLD SITING SURFACE (T.S.S.)
- EXISTING GROUND PROFILE
- AIRPORT PROPERTY LINE (APL)
- FUTURE AIRPORT PROPERTY LINE (FAPL)
- RUNWAY PROTECTION ZONE (RPZ)
- RUNWAY SAFETY AREA (RSA)
- RUNWAY OBJECT FREE ZONE (ROFZ)
- RUNWAY OBJECT FREE AREA (ROFA)
- 4830 EXISTING CONTOURS
- EXISTING FENCE
- FUTURE FENCE
- HIGHWAY

11° 57' 16"

MAGNETIC DECLINATION: 11° 57' 16"
SOURCE: INTERPEX/GEOMAGIX 12/23/1997
ANNUAL RATE OF CHANGE: - 4'

300 0 300 600
SCALE IN FEET

OBJECTS WITHIN RWY 27 INNER APPROACH SURFACE

NO.	OBJECT	TOP ELEVATION	AMOUNT OF PENETRATION (ULTIMATE)		PROPOSED ACTION
			34:1 APPROACH SURFACE	20:1 THRESHOLD SITING SURFACE	
(1)	FENCE (E)	3179	+4	+4	RELOCATE FENCE
(2)	FENCE (E)	3172	-24	-48	RELOCATE FENCE
(3)	FENCE (F)(U)	3169	-31	-58	NONE
(4)	ROAD	3152	-22	-52	NONE
(5)	ROAD	3175	-37	-73	NONE
(6)	ROAD	3175	-46	-97	NONE
(7)	HIGHWAY	3158	-94	-158	NONE
(8)	TREES/BUSHES	3198	VARIES	VARIES	TRIM OR REMOVE

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SAN CARLOS APACHE AIRPORT
GLOBE, ARIZONA

AIRPORT LAYOUT PLANS

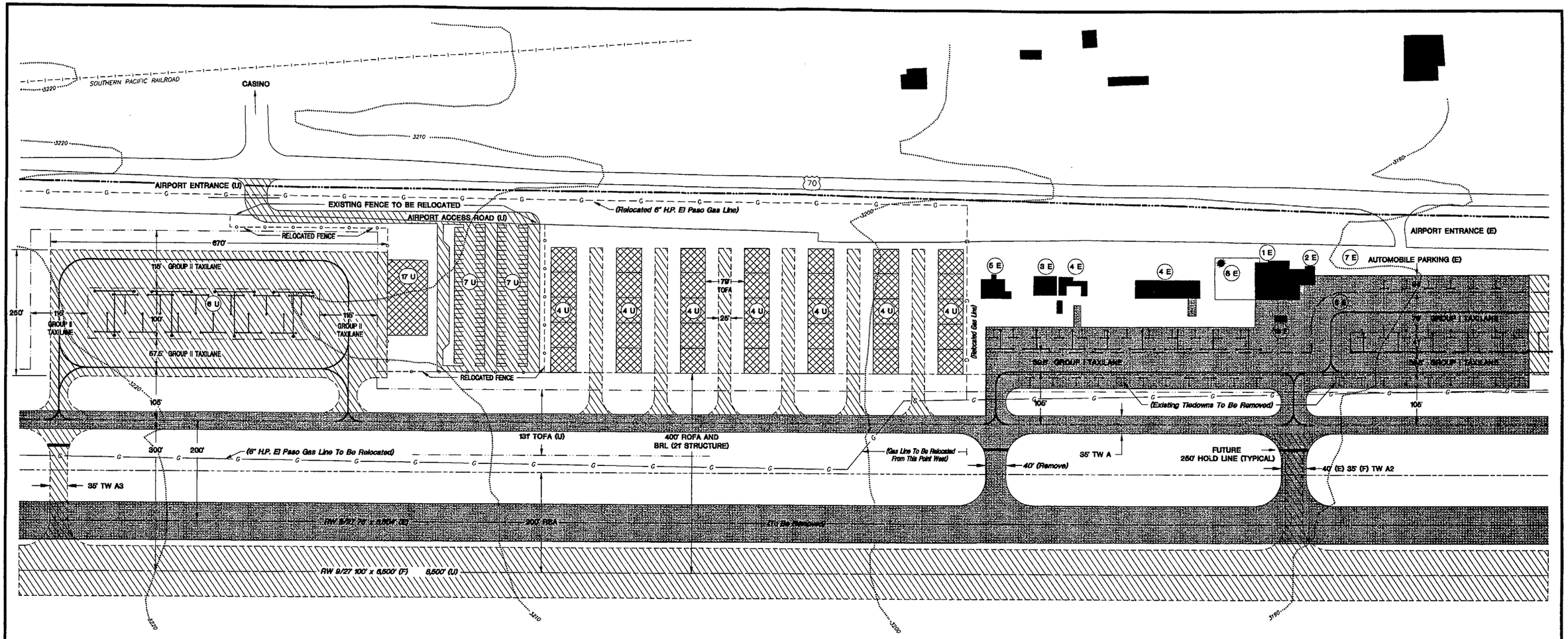
No.	Revision	Date	By

Project No: 965484
Date: 03/19/98
File Name: APPR27

Drawn: TGM
Checked: DAC
Approved: EAA

ULTIMATE INNER APPROACH RW 27

Sheet 6 of 11



100 0 100 200

SCALE IN FEET

11° 57' 16"

ARMSTRONG CONSULTANTS

ELEVATION OF STRUCTURES

FACILITY NO.	DESCRIPTION	OBJECT HEIGHT	ELEVATION (TOP)
1	FBO/HANGAR	15	3207'
2	PILOT LOUNGE	10	3202'
3	HANGAR	15	3213'
4	T-HANGARS	15	3213'
5	TRAILER HOME	10	3208'
8	BEACON (OL required)	43	3241'

NOTES:
1. LATERAL SEPARATION FOR BUILDINGS MET.
2. LATERAL RUNWAY TO AIRCRAFT PARKING APRON SEPARATION NOT MET - APRON TO BE RECONFIGURED.
3. OBSTRUCTION LIGHTING REQUIRED AS NOTED.

AIRPORT FACILITIES LIST

(E)-EXISTING (F)-FUTURE (U)-ULTIMATE

1 FBO HANGAR/OFFICE
2 PILOTS LOUNGE
3 CONVENTIONAL HANGAR
4 T-HANGARS
5 TRAILER HOUSE/OFFICE
6 APRON
7 AUTO PARKING
8 BEACON
9 NDB
10 VASI
11 PAPI
12 REIL
13 THRESHOLD LIGHT
14 SEGMENTED CIRCLE
15 LIGHTED WIND CONE
16 SUPPLEMENTAL WIND CONE
17 TERMINAL
18 FUEL PUMP

LEGEND

EXISTING	ULTIMATE	DESCRIPTION	EXISTING	ULTIMATE	DESCRIPTION
		DEVELOPMENT			IMPROVED ROAD
		STRUCTURE/FACILITIES			THRESHOLD LIGHT
		DRAINAGE			REIL
		AIRPORT BOUNDARY LINE			VASI / PAPI
		RUNWAY PROTECTION ZONE (RPZ)			LIGHTED WIND CONE
		RUNWAY SAFETY AREA (RSA)			SUPPLEMENTAL WIND CONE
		RUNWAY OBJECT FREE ZONE (ROFZ)			AIRPORT REFERENCE POINT (ARP)
		RUNWAY OBJECT FREE AREA (ROFA)			AIRPORT BEACON
		TAXIWAY SAFETY AREA (TSA)			NDB
		TAXIWAY OBJECT FREE AREA (TOFA)			SEGMENTED CIRCLE
		BUILDING RESTRICTION LINE (BRL)			AIRCRAFT TIEDOWN
5100		CONTOURS			STATE GRID COORDINATE (NAD '83)
		FENCING			USGS-NGS CONTROL POINT
		6" H.P. GAS LINE			

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SAN CARLOS APACHE AIRPORT
GLOBE, ARIZONA

AIRPORT LAYOUT PLANS

Project No: 965484
Date: 03/19/98
File Name: TAD

Drawn: TGM
Checked: DAC
Approved: EAA

No.	Revision	Date	By

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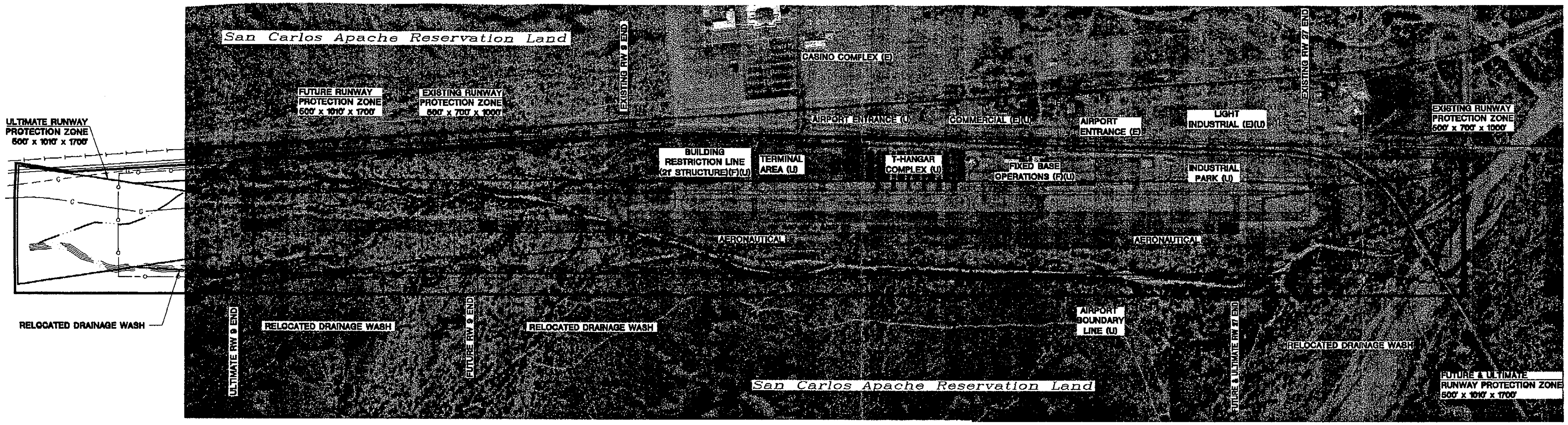
TERMINAL AREA DRAWING



GSX IMAGE: LU-ON.TIF
SCALE: 849 BR:60 CON:10

LEGEND		
EXISTING	ULTIMATE	DESCRIPTION
		DEVELOPMENT
		STRUCTURE/FACILITIES
		DRAINAGE
		AIRPORT BOUNDARY LINE
		RUNWAY PROTECTION ZONE (RPZ)
		RUNWAY SAFETY AREA (RSA)
		BUILDING RESTRICTION LINE (BRL)
		IMPROVED ROAD
		FENCING
		6" H.P. GAS LINE

NOTE: EXISTING AIRPORT BOUNDARY LINE COINCIDES WITH EXISTING AIRPORT PERIMETER FENCE.

LAND USE ORDINANCES

NO LAND USE ORDINANCES IN EFFECT.
ALL LAND USES CONTROLLED BY THE SAN CARLOS APACHE TRIBE.
COMPATIBLE LAND USE ASSURANCE LETTER ON FILE.

MAGNETIC DECLINATION: 11° 57' 16"
SOURCE: INTERPEX/GEOMAGIX 12/23/1997
ANNUAL RATE OF CHANGE: - 41"

500 0 500 1000
SCALE IN FEET

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Project No: 965484
Date: 03/19/98
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Drawn: TGM
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Approved: EAA

ON-AIRPORT LAND USE

Sheet 8 of 11

LEGEND

	AIRPORT PROPERTY LINE
	AIRPORT INFLUENCE AREA
	RUNWAY PROTECTION ZONE
	65 DNL NOISE CONTOUR (1)
◄	RWY 9 FLIGHT PATTERN
▽	RWY 27 FLIGHT PATTERN
◄ 1 MILE ►	DIMENSIONS IN NAUTICAL MILES (NM)

1) NOISE CONTOUR EXCERPTED FROM DRAFT AIRPORT MASTER PLAN DATED JANUARY 7, 1998 FORECAST YEAR 2016 NOISE CONTOUR DEPICTED ON DRAWING.

METRIC CONVERSIONS

1 MILE = 1.6093 Km
1 YARD = 0.9144 METER
1 FOOT = 0.3048 METER
1 INCH = 2.54 CENTIMETERS

1300 0 1300 2600
SCALE IN FEET

LAND USE AND ZONING PLANS IN EFFECT

ALL LAND USES WITHIN AIRPORT INFLUENCE AREA, AND ON SAN CARLOS APACHE RESERVATION LAND, CONTROLLED BY THE SAN CARLOS APACHE TRIBE.

LAND DEVELOPMENT GUIDELINES

FUTURE AIRPORT PROPERTY: DESIGNATE SUFFICIENT LAND TO CONSTRUCT AIRFIELD IMPROVEMENT, SECURE RUNWAY PROTECTION ZONES, AND CONTAIN TO THE EXTENT POSSIBLE NOISE IMPACTS OF DNL 65 OR GREATER.

RUNWAY PROTECTION ZONES: CONTAIN WITHIN AIRPORT PROPERTY BOUNDARIES OR OBTAIN APPROPRIATE EASEMENTS.

APPROACH AREAS: PERMIT ONLY COMPATIBLE DEVELOPMENT. ENSURE COMPLIANCE WITH THE SAN CARLOS APACHE TRIBE AND AIRPORT SAFETY ZONE POLICIES, AND STRUCTURE HEIGHT LIMITATIONS TO CONFORM TO FAR PART 77 CRITERIA.

AIRPORT INFLUENCE AREA/TRAFFIC PATTERN AIRSPACE: REVIEW ALL DEVELOPMENT PROJECTS FOR COMPATIBILITY AND COMPLIANCE WITH FAR PART 77 AND SAN CARLOS APACHE TRIBE LAND USE POLICIES WHICH MAY EXIST.

NOTE: THERE ARE NO SOLID WASTE LANDFILLS WITHIN 5 MILES OF THE SAN CARLOS APACHE AIRPORT.

NOTE: ALL LAND IS OWNED BY THE SAN CARLOS APACHE TRIBE. PROPERTY LINES IDENTIFY LAND DESIGNATED FOR AIRPORT USE.

AIRPORT INFLUENCE AREA

OPEN SPACE

1/2 MILE

ULTIMATE RW 9 & RW 27
FLIGHT PATH

1/2 MILE

OPEN SPACE

San Carlos Apache Reservation

1/2 MILE

1 3/4 MILE

EXISTING RW 9 & RW 27
FLIGHT PATH

1 3/4 MILE

1/2 MILE

CASINO
COMPLEX

COMMERCIAL AND
LIGHT INDUSTRIAL

FUTURE
GOLF COURSE

FUTURE & ULTIMATE
RUNWAY PROTECTION ZONE
500' x 1010' x 1700'

ULTIMATE RUNWAY PROTECTION ZONE
500' x 1010' x 1700'

OPEN SPACE
(CATTLE GRAZING)

OPEN SPACE
(CATTLE GRAZING)

San Carlos Apache Reservation

OPEN SPACE
(CATTLE GRAZING)

AIRPORT INFLUENCE AREA

GSX IMAGE: LU-OFF.TIF
SCALE: 2000 BR: 50 CON: 10

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SAN CARLOS APACHE AIRPORT
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AIRPORT LAYOUT PLANS

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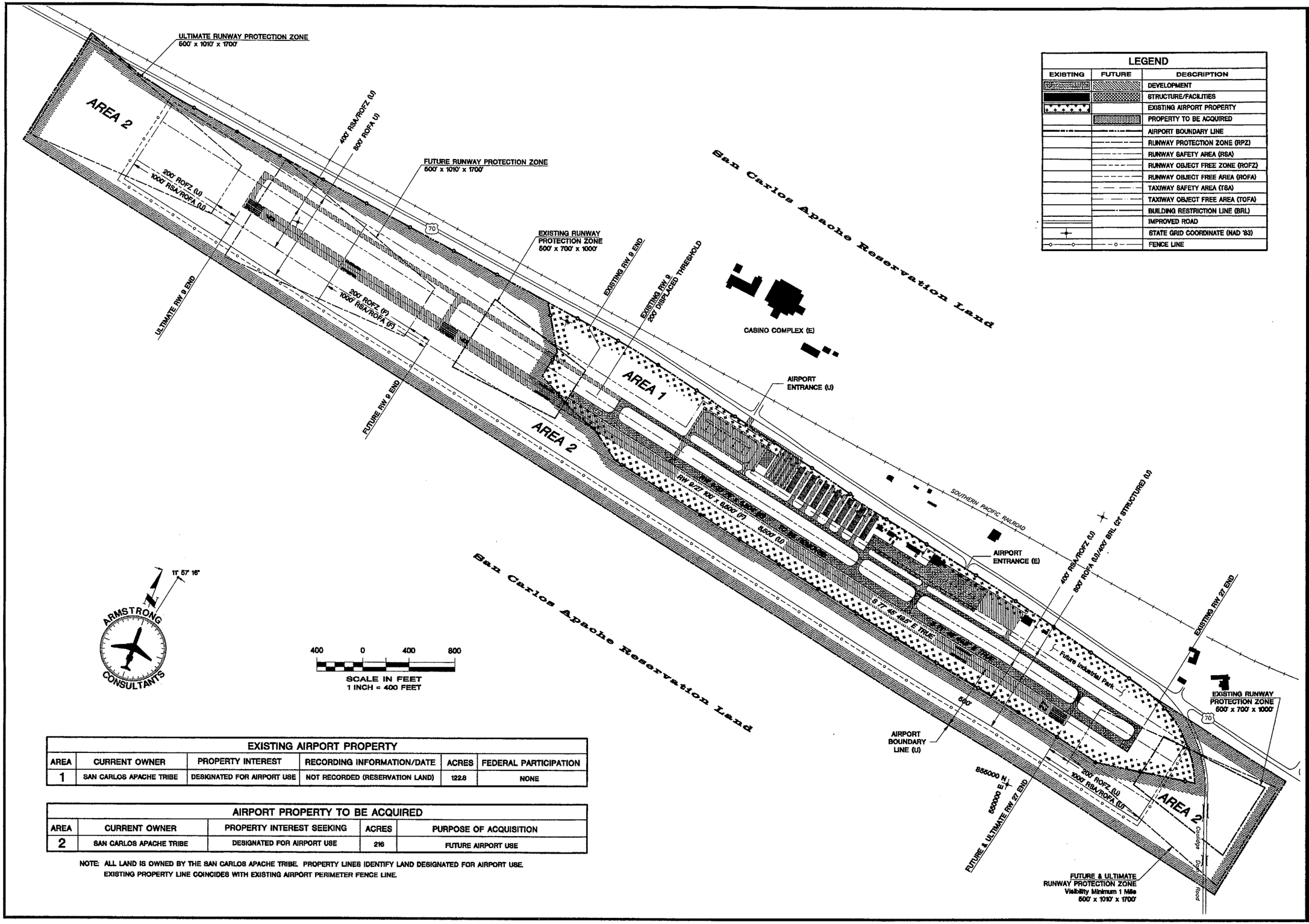
Project No: 965484
Date: 03/19/98
File Name: LANDUSE2

Drawn: TGM
Checked: DAC
Approved: EAA

OFF-AIRPORT
LAND USE

Sheet 9 of 11



400 0 400 800
SCALE IN FEET
1 INCH = 400 FEET

LEGEND		
EXISTING	FUTURE	DESCRIPTION
		DEVELOPMENT
		STRUCTURE/FACILITIES
		EXISTING AIRPORT PROPERTY
		PROPERTY TO BE ACQUIRED
		AIRPORT BOUNDARY LINE
		RUNWAY PROTECTION ZONE (RPZ)
		RUNWAY SAFETY AREA (RSA)
		RUNWAY OBJECT FREE ZONE (ROFZ)
		RUNWAY OBJECT FREE AREA (ROFA)
		TAXIWAY SAFETY AREA (TSA)
		TAXIWAY OBJECT FREE AREA (TOFA)
		BUILDING RESTRICTION LINE (BRL)
		IMPROVED ROAD
		STATE GRID COORDINATE (NAD '83)
		FENCE LINE

EXISTING AIRPORT PROPERTY					
AREA	CURRENT OWNER	PROPERTY INTEREST	RECORDING INFORMATION/DATE	ACRES	FEDERAL PARTICIPATION
1	SAN CARLOS APACHE TRIBE	DESIGNATED FOR AIRPORT USE	NOT RECORDED (RESERVATION LAND)	1228	NONE

AIRPORT PROPERTY TO BE ACQUIRED				
AREA	CURRENT OWNER	PROPERTY INTEREST SEEKING	ACRES	PURPOSE OF ACQUISITION
2	SAN CARLOS APACHE TRIBE	DESIGNATED FOR AIRPORT USE	216	FUTURE AIRPORT USE

NOTE: ALL LAND IS OWNED BY THE SAN CARLOS APACHE TRIBE. PROPERTY LINES IDENTIFY LAND DESIGNATED FOR AIRPORT USE. EXISTING PROPERTY LINE COINCIDES WITH EXISTING AIRPORT PERIMETER FENCE LINE.

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Project No: 965484
Date: 03/19/98
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Drawn: TGM
Checked: DAC
Approved: EAA

EXHIBIT "A"

Sheet: 10 of: 11